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10/634,141	08/04/2003	Ilya V. Karpov	ITO.0554US (P16589)	5089

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The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ILYA V. KARPOV

Appeal 2009-0098
Application 10/634,141
Technology Center 2800

Decided:[1] May 7, 2009

Before KENNETH W. HAIRSTON, JOSEPH F. RUGGIERO, and CARLA M. KRIVAK, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

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[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

In a decision dated December 30, 2008, the Board affirmed the Examiner's indefiniteness rejection of claims 32 to 37, and affirmed the Examiner's obviousness rejection of claims 1, 4, 8, 10, and 32 to 37. Appellant has requested a rehearing of our decision to affirm the obviousness rejection.

In the decision, we agreed with Appellant's argument that Chiang does not form the heater material 22 in the pore 31 to the upper surface of the insulator material 14, and then remove an upper portion of the heater material 22 in the pore 31, as set forth in the claims on appeal (Decision 7). Although Chiang does not fill the pore with metal and then remove some of the metal, we held:

> By skipping the claimed step of removing an upper portion of the heater material, Chiang saves not only processing time but material that is wasted by the removal of the heater material. In other words, by filling the heater material below the upper level of the insulating material, Chiang can avoid the claimed step of removing the upper portion of the heater material, and in the process avoid the problem created when the heater material is too high in the insulator material (Findings of Fact 2 to 4). Thus, for the advantages of time and material savings, we find that it would have been manifestly obvious to the skilled artisan to perform the method steps of claim 1 according to Chiang, but without the step of removing the upper portion of the heater. After all, the artisan is presumed to possess both skill and common sense. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. [1727,] 1742 [(2007)]. If additional heater material is required to be removed from the heater material in Chiang, then it would have been obvious to the skilled artisan to remove the heater

> material as taught by Harshfield (Finding of Fact 7).

(Decision 7).

In response, Appellant argues:

> The problem with the Chiang approach is that he has a very small heater and a very long chalcogenide material. Thus, he saves the trouble of removing the chalcogenide material, at the expense of poor operating characteristics of his memory cell. His poor operating characteristics would be due to the extra energy needed to heat all the extra chalcogenide. Generally, what happens is a conductive filament forms through the chalcogenide upon heating. In the claimed invention, a short filament would be all that would be needed. In Chiang, the filament that forms in phase change would have to extend almost the entire length of the pore. This requires extra programming energy and greater power consumption of the resulting memory.

(Request 2).

Appellant's arguments are not convincing of the nonobviousness of the claimed invention because the claims on appeal do not recite the size of the heater and the chalcogenide material nor the amount of energy needed to heat the chalcogenide material. To be more exact, the claims on appeal do not specifically recite a chalcogenide material or the formation of a conductive filament through the chalcogenide material during heating.

Appellant's argument (Request 2) that Harshfield forms the heater before forming the sidewall spacers is also not convincing of the nonobviousness of the claimed invention because we relied on Chiang, as opposed to Harshfield, for the teaching of forming sidewall spacers prior to forming the heater. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981). We

still maintain that it would have been obvious to the skilled artisan to remove additional material from the heater in Chiang, as taught by Harshfield, if additional heater material has to be removed from Chiang. With respect to Appellant's argument (Request 3) concerning the technique used by Harshfield to remove heater material, we note that the test for obviousness does not mandate bodily incorporation of the teachings of Harshfield into the teachings of Chiang. *Keller*, 642 F.2d at 425.

In summary, the applied references teach or would have suggested to the skilled artisan all of the method steps set forth in claims 1, 4, 8, 10, and 32 to 37, and Appellant's arguments are not convincing of the nonobviousness of the claimed subject matter.

Appellant's request for rehearing has been granted to the extent that our decision has been reconsidered, but such request is denied with respect to making any modifications to the decision.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

REHEARING DENIED

babc

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